

CLAIMS

1. A prophylactic/therapeutic agent for bone and joint diseases, comprising a compound or its salt that inhibits the activity of a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

2. A prophylactic/therapeutic agent for bone and joint diseases, comprising a compound or its salt that inhibits the expression of a gene for a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

3. A prophylactic/therapeutic agent for bone and joint diseases, comprising an antisense nucleotide having a base sequence which is complementary or substantially complementary to the base sequence of a polynucleotide encoding a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide, or a part of the base sequence.

4. A prophylactic/therapeutic agent for bone and joint diseases, comprising an antibody to a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

5. The prophylactic/therapeutic agent according to claim 1, 2, 3 or 4, wherein the bone and joint diseases are chondrodysplasia, bone dysplasia, osteoporosis, osteoarthritis, chronic articular rheumatism, arthritis, synovitis, metabolic arthropathy or sports-related joint disorders.

6. A diagnostic agent for bone and joint diseases, comprising an antibody to a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

7. A diagnostic agent for bone and joint diseases, comprising a polynucleotide encoding a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.

8. The diagnostic agent according to claim 6 or 7, wherein the bone and joint diseases are chondrodysplasia, bone dysplasia, osteoporosis, osteoarthritis, chronic articular rheumatism, arthritis, synovitis, metabolic arthropathy or sports-related joint

disorders.

9. A prophylactic/therapeutic agent for bone and joint diseases, comprising a compound or its salt having an action of inhibiting a sulfatase activity.

10. A prophylactic/therapeutic agent for bone and joint diseases, comprising a compound or its salt having an action of inhibiting the expression of a sulfatase.

11. A method of screening a prophylactic/therapeutic agent for bone and joint diseases, which comprises using a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

12. A kit for screening a prophylactic/therapeutic agent for bone and joint diseases, comprising a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.

13. A method of screening a prophylactic/therapeutic agent for bone and joint diseases, which comprises using a polynucleotide encoding a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.

14. A kit for screening a prophylactic/therapeutic agent for bone and joint diseases, comprising a polynucleotide encoding a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.

15. The prophylactic/therapeutic agent for bone and joint diseases, which is obtainable using the screening method according to claim 11 or 13, or the screening kit according to claim 12 or 14.

16. A method of preventing/treating bone and joint diseases, which comprises administering to a mammal an effective dose of a compound or its salt that inhibits the activity of a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, or an effective dose of a compound or its salt that inhibits the expression of a gene for the protein.

17. A method of preventing/treating bone and joint diseases, which comprises inhibiting the activity of a protein having an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, or inhibiting the expression of a gene for the protein.

18. Use of a compound or its salt that inhibits the activity of a protein having

an amino acid sequence which is the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, or a compound or its salt that inhibits the expression of a gene for the protein, to manufacture a prophylactic/therapeutic agent for bone and joint diseases.